INTRODUCTION

Mission

The Naval Postgraduate School (NPS) was established to serve the advanced educational needs of the Navy. The broad responsibility of the school is reflected in its stated mission:

> Increase the combat effectiveness of U.S. and allied armed forces and enhance the security of the U.S.A. through advanced education and research programs focused on the technical, analytical, and managerial tools needed to confront defense related challenges of the future.

To fulfill its mission, the Naval Postgraduate School strives to sustain excellence in the quality of its instructional programs, to be responsive to technological change and innovation in the Navy, and to prepare officers to introduce and utilize future technologies.

The research program at NPS exists to support the primary mission of graduate education. Research at NPS:

- maintains upper division course content and programs at cutting edge;
- challenges students with creative problem solving experiences on DoD relevant issues;
- advances DoN/DoD technology;
- solves warfare problems; and
- attracts and retains quality faculty.

Academic Programs

To meet its educational requirements, the Navy has developed a unique academic institution at the Naval Postgraduate School through the use of specially tailored academic programs, and a distinctive organization trying academic disciplines to naval and joint warfighting applications.

NPS is an academic institution whose emphasis is on study and research programs that are relevant to the Navy's interests, as well as the interests of other arms of the Department of Defense (DoD). The programs are designed to accommodate the unique requirements of the military, including requirements for Defense Acquisition, and the Program for Joint Education (PJE).

Curricula at NPS are grouped into four schools:

Graduate School of Operational and Information Sciences

- Computer Science
- Electronic Warfare International
- Information Systems Technology
- Information Warfare
- Joint C4I Systems
- Modeling, Virtual Environment, and Simulation (MOVES)
- Operations Analysis
- Operational Logistics
- Special Operations
- Intelligence Information Management
- Undersea Warfare
- Undersea Warfare International
- Information Systems and Operations
- Systems Engineering and Intelligence (SEI)
- Software Engineering
- Space Systems Operations

Graduate School of Business and Public Policy

- Acquisition/Contract Management
- Contract Management
- Defense Systems Management/Analysis
- Financial Management
- Manpower Systems Analysis
- Leadership Education and Development
- Material Logistics
- Shore Installation Management
- Systems Acquisition Management
- Systems Inventory Management
- Transportation Management
- Transportation Logistics Management
- Program Management

School of International Graduate Studies

- Area Studies
  - Middle East, Africa, South Asia, Far East, Southeast Asia, Pacific
  - Middle East, Africa, South Asia
  - Western Hemisphere
  - Russia, Europe, Central Asia
- Civil Military Relations
- Regional Intelligence
- International Program/Defense Systems Management
- Strategic Studies
- Resource/Planning Management for International Defense

Graduate School of Engineering and Applied Science

- Aeronautical Engineering Avionics
- Aeronautical Engineering
- Applied Mathematics
- Electronic Systems Engineering
- Meteorology-Oceanography (METOC)
- Space Systems Engineering
- Combat Systems
- Meteorology
- Naval/Mechanical Engineering
- Oceanography
- Operational Oceanography
- Test Pilot School Co-Op
- Underwater Acoustics
- Applied Physics

Students

The student body consists of U.S. officers from all branches of the uniformed services, civilian employees of the federal government and military officers and government civilian employees of other countries. Resident degree/subspecialty student population for March 2001 is shown in Figure 1.

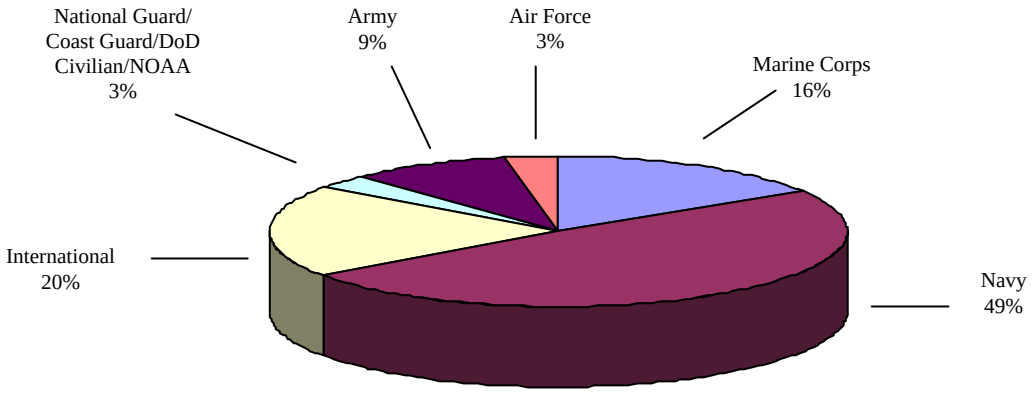

Figure 1. Resident Degrees/Subspecialty Student Population for March 2001 (Total Enrollment: 1192)

Academic Degrees

Although the curricula are tailored to address defense requirements, they are developed within the framework of classical academic degrees, meeting the highest academic standards. Each curriculum leads to a master's degree; however, additional study can lead to either an engineer's degree or the doctor's degree. Below is a listing of the degrees offered at NPS:

Master of Arts Degrees
International Security and Civil-Military Relations
National Security Affairs

Master of Science Degrees
Aeronautical Engineering
Applied Mathematics
Applied Physics
Applied Science
Astronautical Engineering
Computer Engineering
Computer Science
Contract Management
Defense Analysis
Electrical Engineering
Engineering Acoustics
Engineering Science
Information Systems and Operations
Information Technology Management
International Resource Planning and Management
Leadership and Human Resource Development
Management
Materials Science and Engineering
Mechanical Engineering
Meteorology
Meteorology and Physical Oceanography
Modeling, Virtual Environments, and Simulation
Operations Research
Physical Oceanography
Physics
Program Management
Software Engineering
Space Systems Operations
Systems Engineering
Systems Technology

Engineer Degrees
Aeronautical and Astronautical Engineer
Electrical Engineer
Mechanical Engineer

Doctor of Philosophy
Aeronautical and Astronautical Engineering
Applied Mathematics
Applied Physics
Computer Science
Electrical Engineering
Engjneering Acoustics
Mechanical Engineering
Meteorology
Modeling, Virtual Environments, and Simulation
Operations Research
Physical Oceanography
Physics
Software Engineering

Doctor of Engineering
Aeronautical and Astronautical Engineering
Engineering Acoustics
Mechanical Engineering

There were 145 degrees conferred in March 2001. Figure 2 indicates the distribution of degree type; Figure 3 indicates the degree conferred.

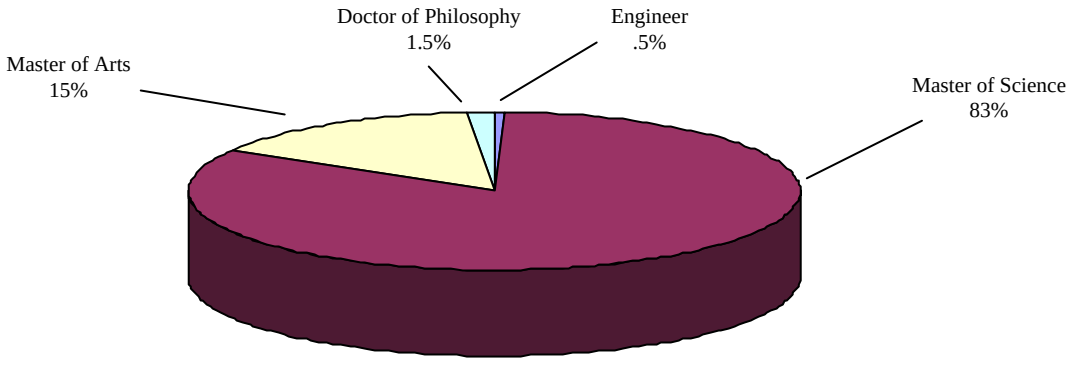

Figure 2. Distribution of Degree Type
(145 Degrees Conferred)

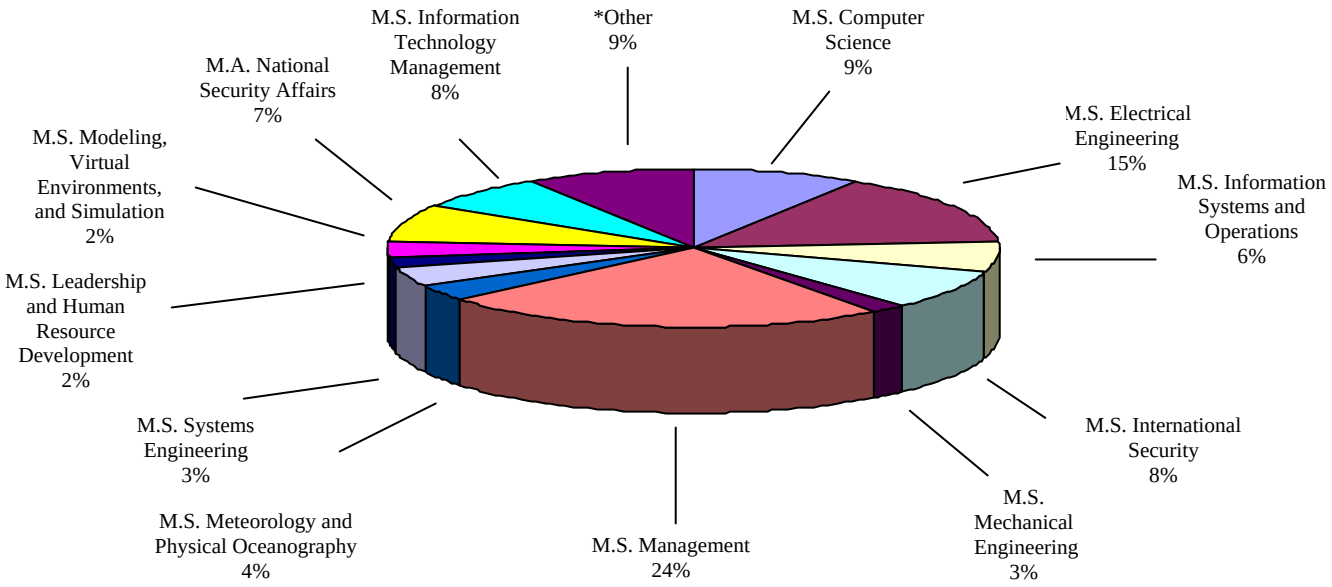

Figure 3. Degrees Conferred in March 2001
(145 Degrees Conferred)

*Ph.D. Electrical Engineering (1); Electrical Engineer (2); M.S. Aeronautical Engineering (2); M.S. Applied Mathematics (1); M.S. Astronautical Engineering (1); M.S. Defense Analysis (1); M.S. Engineering Acoustics (2); M.S. Operations Research (1); M.S. Physical Oceanography (2).

Thesis

The thesis is the capstone achievement of the student's academic endeavor at NPS. Thesis topics address issues from the current needs of the Fleet and Joint Forces to the science and technology that is required to sustain long-term superiority of the Navy/DoD.

Students, with their faculty advisors, provide a very unique capability within the DoD for addressing warfighting problems. This capability is especially important at the present time when technology in general, and information operations in particular, are changing rapidly. Our officers must be able to think innovatively and have the knowledge and skills that will let them apply technologies that are rapidly being developed in both the commercial and military sectors. Their unique knowledge of operations, when combined with a challenging thesis project which requires them to apply their focused graduate education, is one of the most effective methods for both solving Fleet/Joint Force problems and instilling the life-long capability for applying basic principles to the creative solution of complex problems.